

What is claimed:

- 1 1. A billiard cue comprising:
2 a shaft having a wall with an outer surface between a first tip end and a
3 second end, a bore extending from the first tip end for at least a predetermined
4 distance along the length of the shaft toward the second end, the shaft having a wall
5 thickness of about 0.005 inches to about 0.050 inches between opposed ends of the
6 bore, the bore reducing the mass of the tip end to minimize cue ball deflection on
7 impact with the cue.

- 1 2 The billiard cue of claim 1 further comprising:
2 the shaft formed of fibers disposed in a binder.

- 1 3. The billiard cue of claim 2 wherein the fibers are carbon fibers
2 disposed in an epoxy resin binder.

- 1 4. The billiard cue of claim 3 wherein the shaft is formed of a
2 material having a modulus of elasticity greater than or equal to 4.3×10^6 P.S.I.

- 1 5. The billiard cue of claim 1 wherein the bore extends from about
2 4 to about 5 inches from the first tip end of the shaft.

- 1 6. The billiard cue of claim 1 wherein the shaft is formed of a
2 material having a modulus of elasticity greater than or equal to 4.3×10^6 P.S.I.

- 1 7. The billiard cue of claim 1 wherein:
2 the shaft has a tip portion extending from the first tip end; and
3 the bore extending from the first tip end only through the tip portion of
4 the shaft.

- 1 8. The billiard cue of claim 1 further comprising:
2 a lightweight, non-structural material disposed in at least a portion of
3 the bore.